

# Advanced Java Programming

## Week 2 Topic Outline

### Inheritance

1. Is-a vs. has-a relationships
2. Subclass / Superclass (child / parent class)
3. Method overriding
4. Protected members
5. Object class
6. Up-casting
7. Polymorphism
8. Down-casting
  - a. Checking cast safety with `instanceof`
  - b. `ClassCastException`s

### Limiting OOP Behaviors

1. Preventing construction
2. Preventing method overriding
3. Preventing subclassing